

REMARKS

Claims 1-32 are pending in the subject application. Favorable reconsideration in light of the remarks which follow is respectfully requested.

1. 35 U.S.C. §102 Rejections

Claims 1-32 have been rejected under 35 U.S.C. §102(b) as being anticipated by Kovar et al, US Patent No. 5,927,269 ("Kovar I"). The Office asserts that:

Kovar I teaches oligomers for forming coating compositions based on vinyl dioxolane end-capped polyester oligomers. See Kovar I, Abstract; col. 3, line 45 through col. 6, line 39.

Claims 1-32 have been further rejected under 35 U.S.C. §102(b) as being anticipated by Kovar et al, US Patent No. 6,150,429 ("Kovar II"). The Office asserts that:

Kovar II teaches oligomers for forming coating compositions based on vinyl dioxolane end-capped polyester oligomers. See Kovar II, Abstract; col. 3, line 30 through col. 6, line 59.

Claims 1-32 have been further rejected under 35 U.S.C. §102(b) as being anticipated by Rubin et al, US Patent No. 6,300,457 ("Rubin"). The Office asserts that:

Rubin teaches oligomers for forming coating compositions based on vinyl dioxolane end-capped polyester oligomers. See Rubin, Abstract; col. 4, line 51 through col. 9, line 31.

Applicants respectfully traverse.

Applicants claim, in claim 1, a curable resin composition, containing essentially no volatile organic components, comprising at least one enzyme degradable, vinyl dioxolane end-capped oligomer, wherein the vinyl dioxolane end-capped oligomer comprises at least one enzyme degradable segment, and at least one catalyst to initiate polymerization of the oligomer to form an enzyme degradable polymer.

Applicants claim, in claim 32, a method of providing a enzyme degradable polymer coating, the method comprising applying a curable resin composition containing essentially no volatile organic components and allowing the curable resin

composition to cure, wherein the curable resin comprises at least one vinyl dioxolane end-capped oligomer, wherein the vinyl dioxolane end-capped oligomer comprises at least one enzyme degradable segment, and at least one catalyst to initiate polymerization of the oligomer to form a enzyme degradable polymer.

Applicants found that resin compositions were lacking in that they were difficult to remove. In particular, when a cured resin requires removal, it must be stripped. In the past, methylene chloride based chemical strippers were used to remove cured resins, but the use of these strippers has now been prohibited by the EPA. Alternatively, a number of other solvent-based stripping agents have been used. However, such solvent-based stripping agents require expensive pollution control equipment. In addition, the disposal of the removed resin and the solvent-based stripping agent further impacts the environment and increases costs. Presently, new, "environmentally compliant" chemical strippers are used in combination with non-chemical methods, such as sanding. However, such methods are still costly and time consuming.

Thus, Applicants developed high performance curable resin compositions that contain no or substantially no VOCs and which can be removed by use of an agent that readily, effectively and safely removes such curable resin compositions upon demand. In particular, the resin compositions are enzyme degradable. In one embodiment, the enzyme is sprayed on the cured resin as an aqueous concentrate solution, and the cured resin is removed after about 24 hours with only a single application of the enzyme. If desired, the cured resin may be removed in less than one hour by the use of environmentally compliant water soluble softening agents, such as benzyl alcohol. In other embodiments, after applying a removal enzyme to degrade the cured resin, the resin may be removed, e.g., by use of fluid and/or air flows. In yet other embodiments, additional steps, e.g., scraping, may be taken to aid in the removal process. As set forth in the specification, "degrading" the cured resin in the case of a coating is understood in the present invention to mean that a cured resin is converted from a hard, tenacious structure to a friable, brittle, breakable or a softened and swelled gelatinous matter that is readily removable as such or with the aid of a water flow, air flow and/or application of a scraping motion (see page 6, lines 15-28).

Kovar I describes polyester/vinyl dioxolane based coating compositions. These compositions comprise a polyester prepolymer and a catalyst to initiate polymerization. The polyester prepolymer comprises a substituted vinyl dioxolane monomer and an ester of a polycarboxylic acid. However, Kovar I does not describe or suggest a coating composition or a method for forming a coating composition comprising an enzyme degradable, vinyl dioxolane end-capped oligomer, wherein the vinyl dioxolane end-capped oligomer comprises at least one enzyme degradable segment. This teaching comes purely from the present invention.

As provided in MPEP-2131, a claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. *Verdegall Bros. v. Union Oil Co. of California*, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). Or stated another way, "The identical invention must be shown in as complete detail as is contained in the ... claims. *Richardson v Suzuki Motor Co.*, 868 F.2d 1226, 9 USPQ 2d. 1913, 1920 (Fed. Cir. 1989). Although identify of terminology is not required, the elements must be arranged as required by the claim. *In re Bond*, 15 USPQ2d 1566 (Fed. Cir. 1990).

For the reasons set forth above, 1 is clearly not anticipated by Kovar I. Each and every element of claim 1 is not found in Kovar I. In particular, Kovar I does not teach or even suggest a coating composition or a method for forming a coating composition comprising an enzyme degradable, vinyl dioxolane end-capped oligomer. Furthermore, Kovar I would not inherently have enzyme degradable, vinyl dioxolane end-capped oligomer. The fact that a certain result or characteristic may occur or be present in the prior art is not sufficient to establish the inherency of that result or characteristic. *In re Rijckaert*, 9 F.3d 1531, 1534, 28 USPQ2d 1955, 1957 (Fed. Cir. 1993); *In re Oelrich*, 666 F.2d 578, 581-82, 212 USPQ 323, 326 (CCPA 1981). "In relying upon the theory of inherency, the examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic necessarily flows from the teachings of the applied prior art." *Ex parte Levy*, 17 USPQ2d 1461, 1464 (Bd. Pat. App. & Inter. 1990). In this case, the vinyl dioxolane oligomer would not necessarily be enzyme degradable.

Kovar II also describes polyester/vinyl dioxolane based coating compositions comprising a polyester prepolymer and a catalyst to initiate polymerization. The polyester prepolymer comprises a substituted vinyl dioxolane monomer and an ester of a polycarboxylic acid. Like Kovar I, Kovar II does not describe or suggest a coating composition or a method for forming a coating composition comprising an enzyme degradable, vinyl dioxolane end-capped oligomer, wherein the vinyl dioxolane end-capped oligomer comprises at least one enzyme degradable segment. This teaching comes purely from the present invention. Furthermore, Kovar II, like Kovar I, would not inherently have enzyme degradable, vinyl dioxolane end-capped oligomer because the vinyl dioxolane oligomer of Kovar II would not necessarily be enzyme degradable.

Rubin describes polyester/polyurethane vinyl dioxolane based coating compositions comprising a polyester prepolymer and a polyurethane prepolymer and a catalyst to initiate polymerization of the polyester and polyurethane prepolymers. Like Kovar I and Kovar II, Rubin does not describe or suggest a coating composition or a method for forming a coating composition comprising an enzyme degradable, vinyl dioxolane end-capped oligomer, wherein the vinyl dioxolane end-capped oligomer comprises at least one enzyme degradable segment. This teaching comes purely from the present invention. Furthermore, Rubin would not inherently have enzyme degradable, vinyl dioxolane end-capped oligomer because the vinyl dioxolane oligomer of Rubin would not necessarily be enzyme degradable.

Accordingly, claims 1 and 32 are not anticipated by Kovar I, Kovar II or Rubin. Claims 2-31 depend from claim 1 and, likewise, are not anticipated by Kovar I, Kovar II or Rubin. Reconsideration and withdrawal of the rejection is respectfully requested.

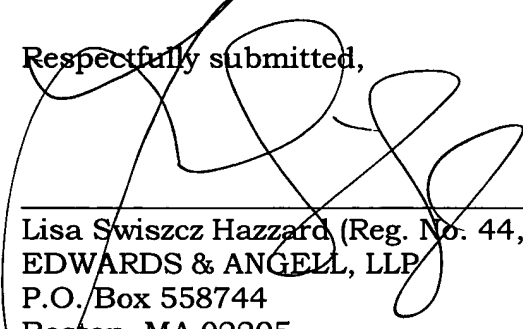
CONCLUSION

Reconsideration and allowance of claims 1-32 is respectfully requested in view of the foregoing discussion. This case is believed to be in condition for immediate allowance. Applicants respectfully requests early consideration and allowance of the subject application.

Applicants believe that additional fees are not required in connection with the consideration of the within matter. However, if for any reason a fee is required, a fee paid is inadequate or credit is owed for any excess fee paid, you are hereby authorized and requested to charge Deposit Account No. **04-1105**.

Should the Examiner wish to discuss any of the amendments and/or remarks made herein, the undersigned attorney would appreciate the opportunity to do so.

Respectfully submitted,



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